

Report to: Road Issues Scrutiny Panel

Date: 20th December 2006

Report of: Head of Highway Management

Report No: 7

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Report Title: **Results of investigations into Traffic Calming in Long Lane, Brightmet Drive and Blenheim Road, Bolton**

**Confidential /
Non Confidential:**

(Non-Confidential) This report does **not** contain information which warrants its consideration in the absence of the press or members of the public

Purpose:

To inform Scrutiny Panel of the casualty reduction performance of the Long Lane and Blenheim Road Area traffic calming schemes and the degree of compliance of traffic calming features with standards.

Recommendations:

Panel is requested to note the report

Decision:

Background Doc(s):

None

INTRODUCTION

- 1) This report describes the results of investigations into the performance of the Long Lane and Blenheim Road Area (incorporating Brightmet Drive) traffic calming schemes and the degree of compliance of related traffic calming features with the specifications and regulations.

PRERFORMANCE

- 2) Traffic speed and flow statistics are detailed in Appendix A. The casualty reduction performance of both schemes is illustrated in Appendix B.
- 3) Limited 'before' traffic flow data exists for the Long Lane scheme only. Here daily traffic flows have fallen by approximately 10%. A greater decrease was seen in the morning peak hour and a lesser decrease in the evening peak. The performance of both Long Lane and the Blenheim Road Area are remarkably similar in their 'after' traffic calming speed readings. Here 85thile speeds are 28.7mph, average speeds approximately 24mph and the percentage not complying with the speed limit 6.4%.
- 4) Long Lane scheme has been in place since 2003 and as such there are now over 3 years of 'after' accident data. In the 3 years after implementation of traffic calming scheme on Long Lane accidents had fallen by 71% (from 14 to 4) and casualties had fallen by 65%. Killed and serious casualties had been eliminated. On Blenheim Road the scheme has now been in place for two and a half years and as such the full 3 year after monitoring period is yet to be completed. The projected 3 year 'after' accident record is expected to be 30% lower than the 3 year 'before' period with casualties down 44%. Killed and serious casualties have been halved.

COMPLIANCE WITH SPECIFICATIONS AND REGULATIONS

- 5) The Road Hump Regulations limit the heights of road humps to 100mm, although no guidance is given on how that should be measured.
- 6) In Bolton, since 2003 (as confirmed in the Traffic Calming Code of Practice adopted in March 2005) the height of road humps within a traffic calmed area has been specified as 75mm (\pm 6mm construction tolerance).
- 7) Surveys have been undertaken on the Long Lane and Blenheim Road schemes, with the results shown in Appendix C. These surveys show that out of a total of 38 road humps surveyed, 15 exceeded the specified tolerance and six of these exceeded the regulation maximum of 100mm. (Detailed drawings will be displayed at the Panel meeting.)

- 8) Following previous investigation and analysis of 'non-compliances', the decision was taken not to undertake action in relation to any road humps which exceeded regulations by only a marginal amount. However, no universal 'de-minimis' threshold measurement has been defined, with individual situations being assessed on their merits, taking into account:
- a. Construction tolerances of ± 6 mm
 - b. Longitudinal/vertical alignment of carriageways
 - c. Any mitigating effect of the length of hump (e.g. a variance in height within a flat-topped, 'bus-friendly' hump would be less noticeable to road users than a similar variance in a round-topped hump).
- 9) Improvements have been made in the specification and supervision of construction of road humps since these schemes were introduced. The Code of Practice now provides for removal or re-shaping of road humps when maintenance work is undertaken.

RECOMMENDATION

- 10) The Panel is recommended to note this report.

APPENDIX A

'BEFORE' & 'AFTER' TRAFFIC SPEED AND FLOW STATISTICS

TRAFFIC CALMING LONG LANE AND BLENHEIM ROAD AREA

	'Before'	'After'
LONG LANE		
85 th %tile speed		28.7mph
Average speed		23.65mph
% over the speed limit		6.4%
Daily traffic flow	10594	9517
Morning peak	1190	868
Evening peak	1102	1057
Count date w/c	Apr-99	Jul-06
BLENHEIM ROAD AREA		
85 th %tile		28.65mph
Average speed		23.45mph
% over the speed limit		6.35%
Daily traffic flow		3319
Morning peak		262
Evening peak		316
Count date w/c		Jul-06

APPENDIX B

'BEFORE' AND 'AFTER' ACCIDENT AND CASUALTY STATISTICS

TRAFFIC CALMING IN LONG LANE AND BLENHEIM ROAD AREA

Scheme Title	Before	After
LONG LANE. (Route traffic calming (tables, refuges etc)		
3 year accident record	14	4
3 year casualty record	20	7
Fatalities	1	0
Serious	0	0
Slight	19	7
Monitoring dates	28/10/1999-27/10/2002	21/01/2003-20/01/2006
Change in annual accidents		Down 3.33 per year
Rate of return		291%
BLENHEIM ROAD AREA (20 mph zone and supporting traffic calming)		
3 year accident record	12	5 (2 years)
3 year casualty record	15	5 (2 years)
Fatalities	0	0
Serious	2	1
Slight	13	4
Monitoring dates	28/01/2001-27/01/2004	02/05/2004-01/05/2006
Rate of return		107%
Further 0.5 years after 02/05/2006-30/09/2006		2
2.5 year accident record	-	7
2.5 year casualty record	-	7
Fatalities	-	0
Serious	-	0
Slight	-	7
Change in annual accidents predicted		Down 1.67 per year

APPENDIX C

COMPLIANCE WITH REGULATIONS AND SPECIFICATION

TRAFFIC CALMING IN LONG LANE AND BLENHEIM ROAD AREA

Round-topped humps

Measurements taken at start, mid-point and end of road hump, along carriageway centre line and each channel (3 measurements on each of 3 lines; 9 survey points in total).

Flat-topped humps

Measurements taken at start and end of approach ramp, mid-point of table and start and end of departure ramp along carriageway centre line and each channel (5 measurements on each of 3 lines; 15 survey points in total).

No. of humps surveyed	No. of humps >100mm	No. of humps > 81mm	No. of humps >1 'non-compliance'
<u>Long Lane (100mm)</u> 23	5	n/a	0
<u>Blenheim Road (75mm)</u> 15	1	9	2*

* 2no. road humps demonstrated non-compliance at more than one survey point.

ES/HE/HM/JGE/15.12.06